

*“Using Podcasts to facilitate learning in an Intensive
Care Nursing Course.”*

Aidín Mc Kinney,

Karen Page.

School of Nursing and Midwifery

Queens University Belfast



Background

- Traditionally critical care courses tend to be taught within the university setting.
- Today's students however have many responsibilities and commitments that can make attending lectures more difficult.
- Releasing staff from clinical areas to attend courses also places a burden on manpower.
- Alternative methods of teaching delivery therefore need to be considered to provide a more flexible learning approach.

Lectures - Active or Passive?

- Lectures are seen as a cost effective method of introducing a new topic and providing students with key facts.
- However there has been criticism that lectures are mainly a passive process.
- There is a need to ensure that students engage more with content and become active participants in their learning.
- Does this mean that we need to dispense with lectures? Or can we adapt them to make learning more effective?

Information and Communication Technology (ICT)

- The development of information and communication technology (ICT) within higher education is now a growing area.
- Many students today are from the “net generation” and there is an increased expectation that ICT will form part of their learning resources.
- Nurse educators need to respond to this and recognise that ICT can provide the opportunity to introduce innovative teaching strategies to enhance learning.

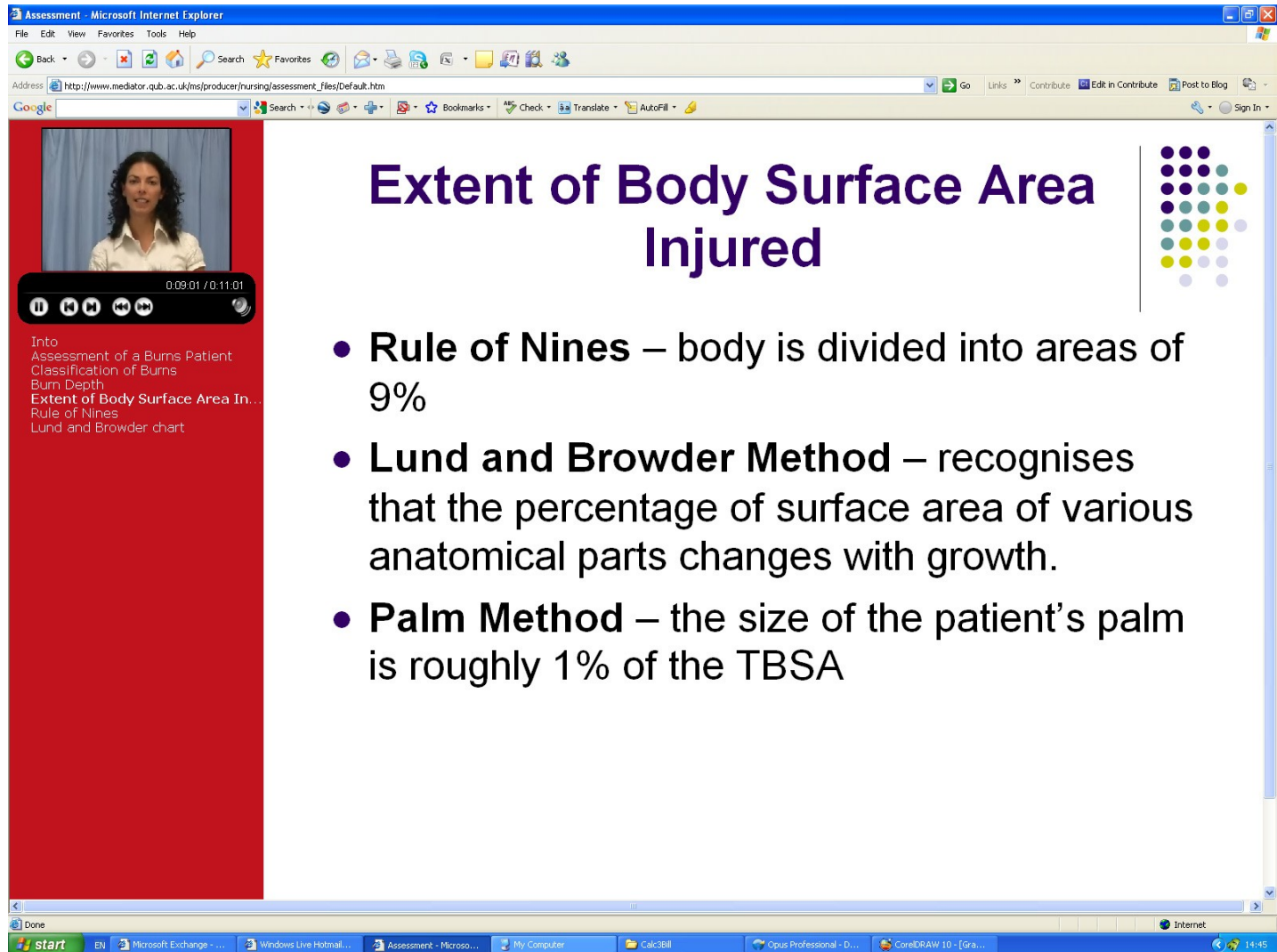
Video streaming and Podcasting

- Video streaming (or webcasting) is a modality that builds on PowerPoint by allowing video or audio content to be incorporated and is distributed via the web.
- In its simplest form the electronic lecture is merely a digitised recording of a conventional lecture that can be viewed via a computer.
- Podcasting is an extension of videostreaming allowing the student to download lectures to portable mobile devices such as iPods or MP3 players.
- The essence of podcasting is therefore about creating content for students who want to listen not just when they want but also where and how they want.

Blended Learning

- Blended learning is a method that combines technology-supported education with traditional education.
- This approach recognises that while technology may be a useful learning resource, it also appreciates that students may need interaction with tutors to clarify understanding.
- Perhaps a combination of the convenience of technology without the loss of face-to-face interaction may deliver the best of both worlds (Kennedy, 2005, Salamonson and Lantz, 2005).

Podcasting



The screenshot shows a Microsoft Internet Explorer browser window. The address bar displays the URL: http://www.mediator.qub.ac.uk/ms/producer/nursing/assessment_files/Default.htm. The main content area is a red-themed slide with a video player on the left and text on the right. The video player shows a woman speaking and has a progress bar at 0:09.01 / 0:11.01. The slide title is "Extent of Body Surface Area Injured". The text on the slide lists three methods for assessing burn severity: Rule of Nines, Lund and Browder Method, and Palm Method. The Windows taskbar at the bottom shows several open applications, including Microsoft Exchange, Windows Live Hotmail, Assessment - Micro..., My Computer, Calc3Bill, Opus Professional, and CorelDRAW 10.

Extent of Body Surface Area Injured

- **Rule of Nines** – body is divided into areas of 9%
- **Lund and Browder Method** – recognises that the percentage of surface area of various anatomical parts changes with growth.
- **Palm Method** – the size of the patient's palm is roughly 1% of the TBSA

Aims/Objectives

- **Aim:** To evaluate nursing students' views on the use of a variety of learning resources to facilitate understanding of critical care topics.
- **Objectives:** To determine whether the introduction of multimedia resources facilitated learning in comparison to more traditional approaches.

Methodology - Design

- *Method:* 1 lecture was selected and made available to students using both online and mobile technology (iPods and MP3 players). The remaining lectures on the ICU course followed a more traditional lecture format.
- *Convenience sampling:* n=36 Critical Care Nursing Students
- *Data Collection:* A questionnaire was developed to capture both quantitative and qualitative data.
- *Analysis:* Quantitative data was analysed using SPSS. Qualitative information required content analysis which identified recurring themes.

Results

- Response rate (n=32)
- Evaluated positively
- 88% agreed that the use of multimedia resources was beneficial
- 'Blended' learning approach identified as the overall preferred approach

Results - Advantages

- **Facilitated learning at individual pace**
 - 'able to learn at my own pace, if I didn't understand things I was able to go over it again'
- **Enhanced understanding**
 - 'I could go back over the pathophysiology and treatment areas that I found the most difficult'
- **Convenient**
 - 'you could download it onto MP3 format to use continually – I think that it would be useful for revision'

Results- Disadvantages

- **Motivation**

- 'long and boring to sit in front of the computer for 2 hours....
Easily lost concentration at home'

- **Lecturer contact**

- 'there were no lecturers to go over bits that I didn't understand..
unable to ask questions'

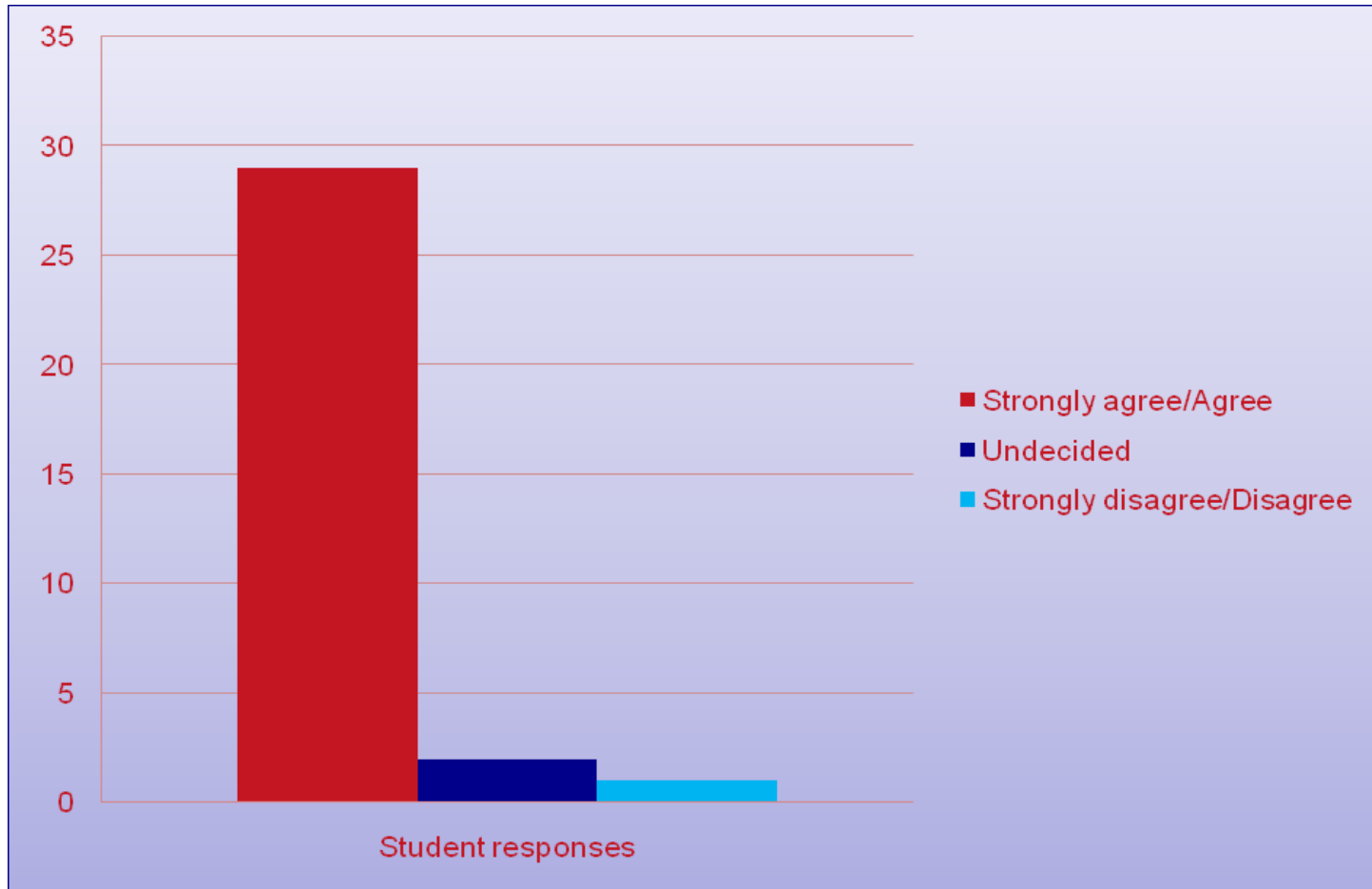
- **IT Difficulties**

- "it took ages to download. Don't have broadband so the
download took forever"

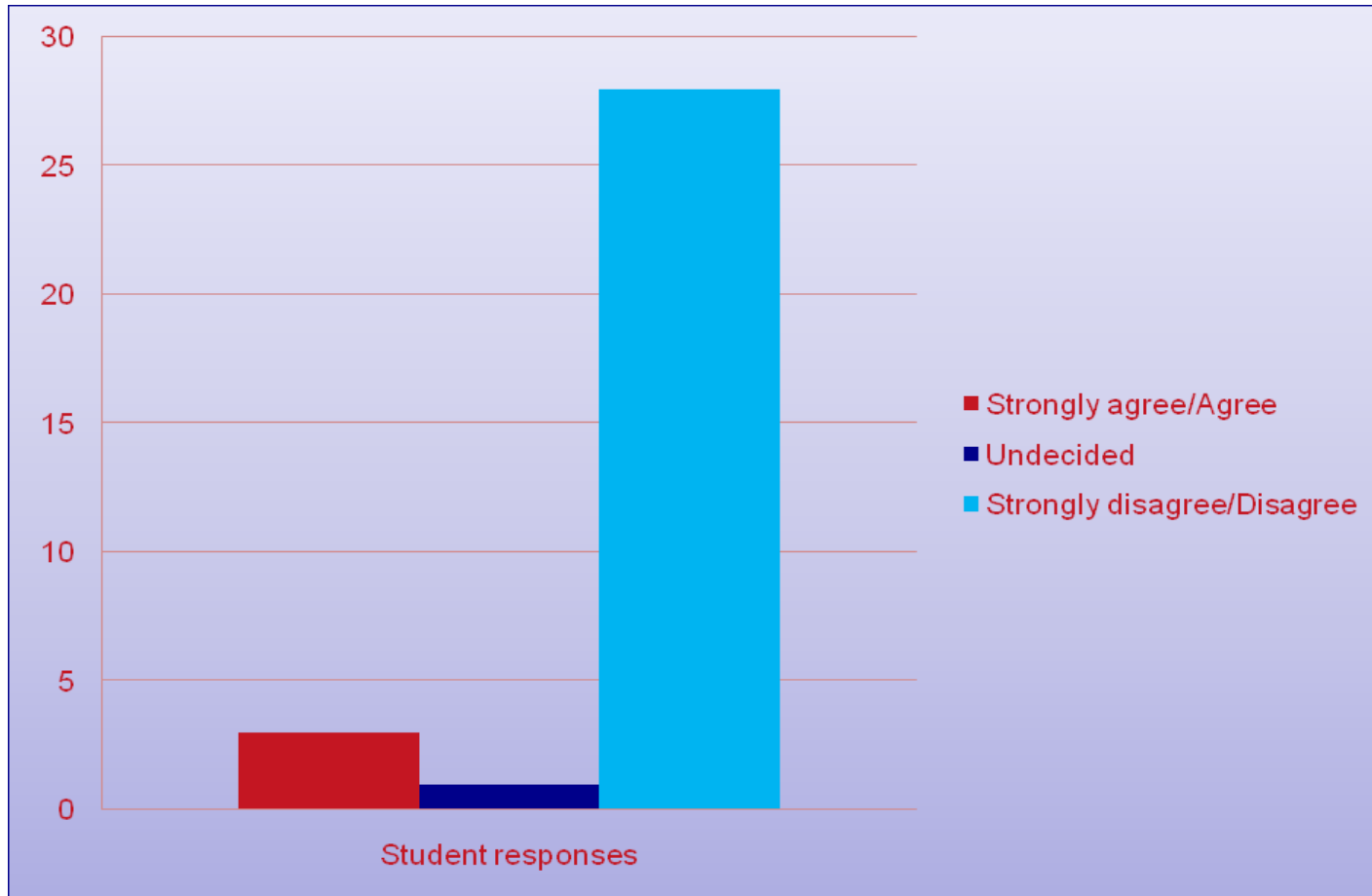
- **Learning Style**

- "I concentrate more in formal lectures and learn more from the
face to face sessions"

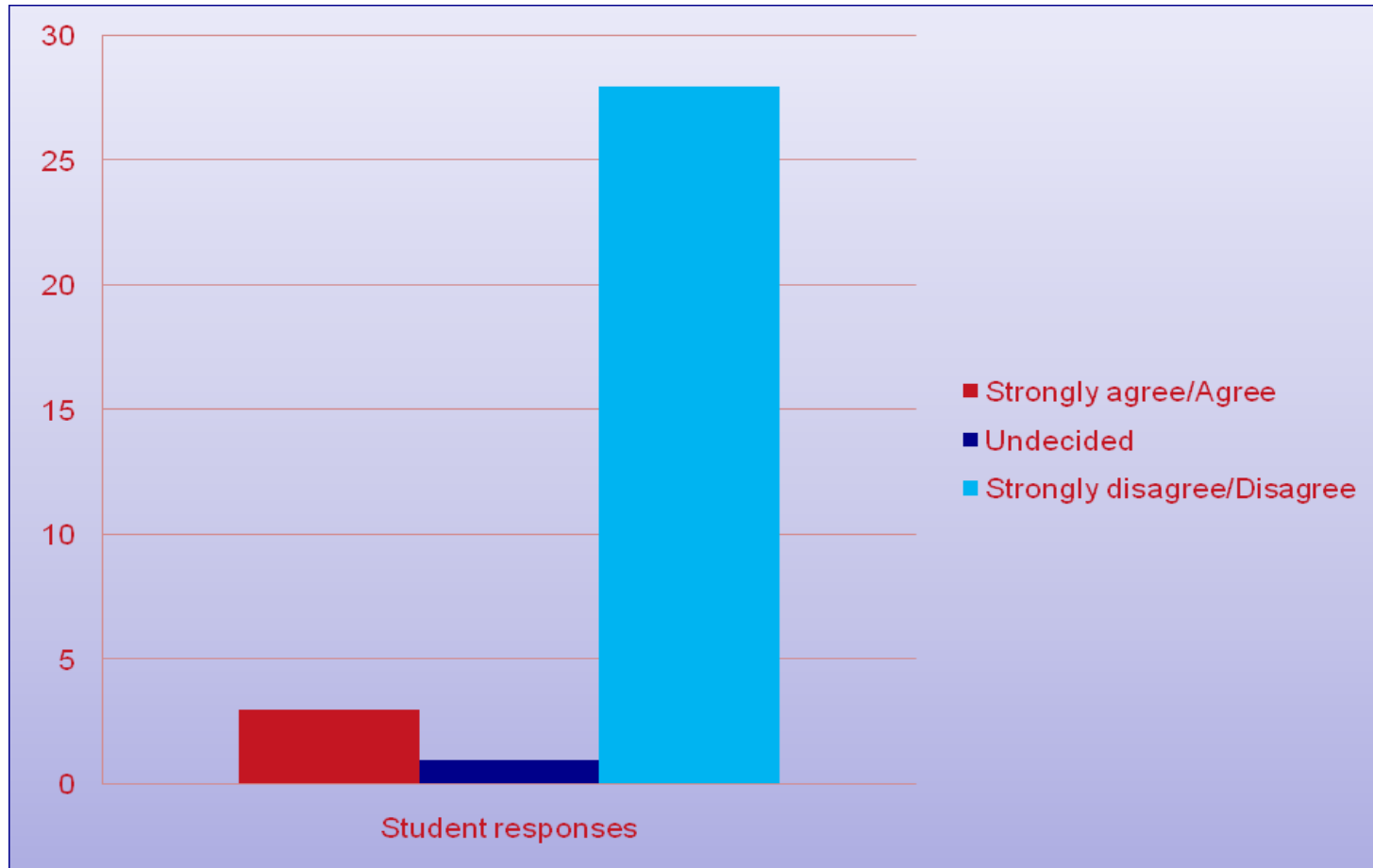
The use of online learning assisted my understanding of the pathophysiology and treatment of burns



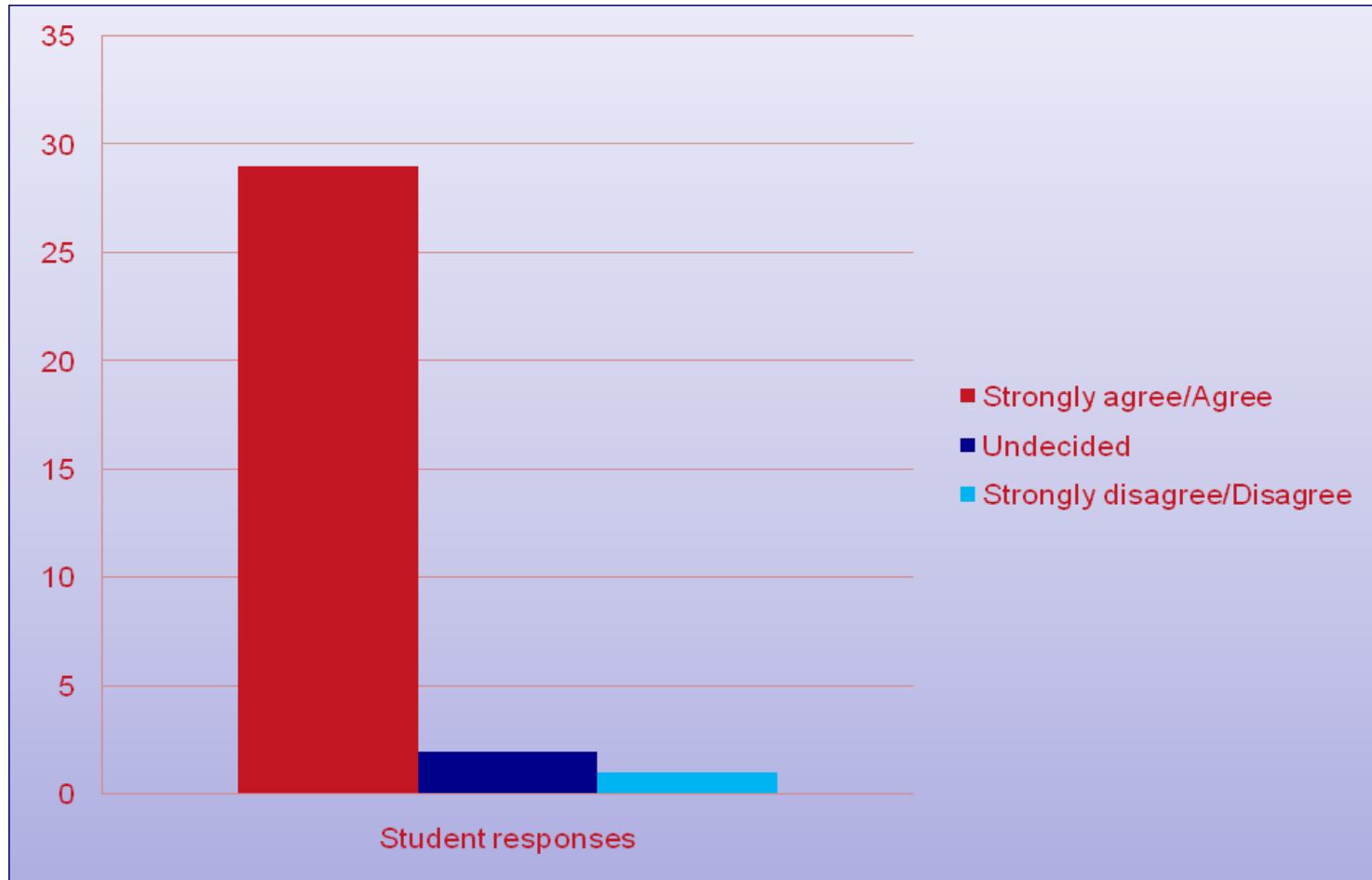
Online learning should be the sole lecture method used in the module



Formal lectures should be the sole lecture method used in the module



A combination of online learning and formal lectures should be used in the module



Built in Learning Activities

- “helped build on knowledge that was already given”.
- It allowed time out at the end of each section. This helped me ensure that section was understood before moving on”.

Limitations

- One cohort of students only evaluated.
- Reliability and validity of the questionnaire used was not established.

Conclusion

- Lectures and tutorials still appear to remain a useful cornerstone for the delivery of the critical care course.
- However there is increasing recognition that the use of ICT can develop student's understanding of challenging concepts in relation to pathophysiology and management of care issues.
- Multimedia learning resources including mobile technologies would appear to enhance this experience and can be integrated successfully with more traditional learning resources.

Acknowledgements:

Ms. Amanda Sefton, Media Services

Contacts:

a.mckinney@qub.ac.uk

k.page@qub.ac.uk